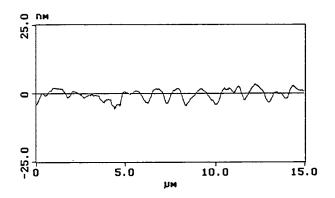
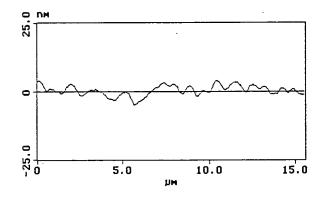
Growth surface prior to growth of the lower DBR

Figure 1A

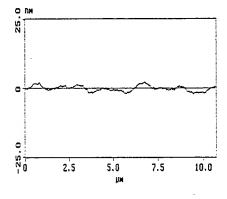


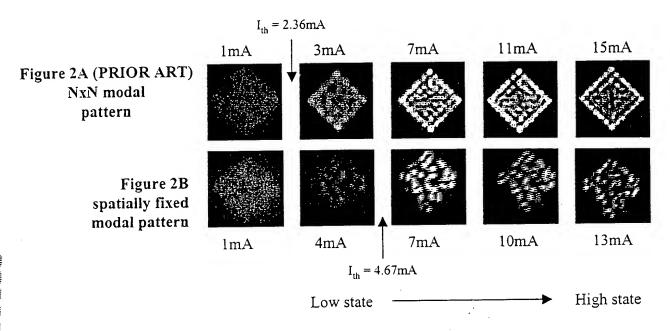
Growth surface after the growth of 20 DBR pair layers Figure 1B



Growth surface during growth of the active region

Figure 1C





Modal Pattern Peak Spacing with Drive Current 5.5 Prior art: NxN modal pattern 5 Invention: Fixed modal patter 4.5 Spacing (µm) 4 3.5 3 2.5 0 2 16 8 10 12 14 2 4 6 0 I (mA)

Figure 3

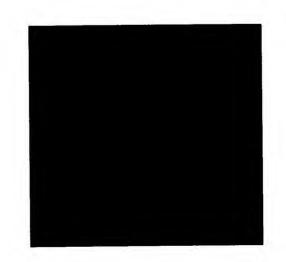
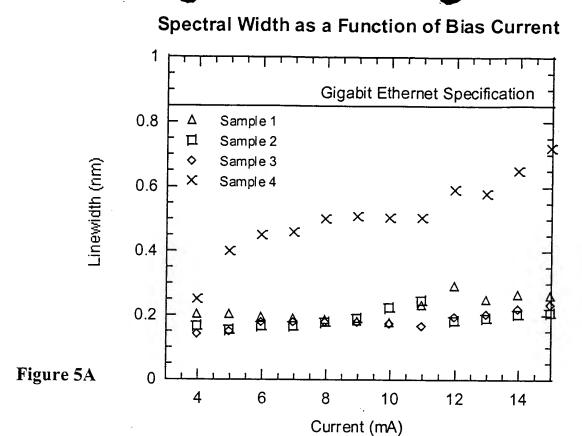
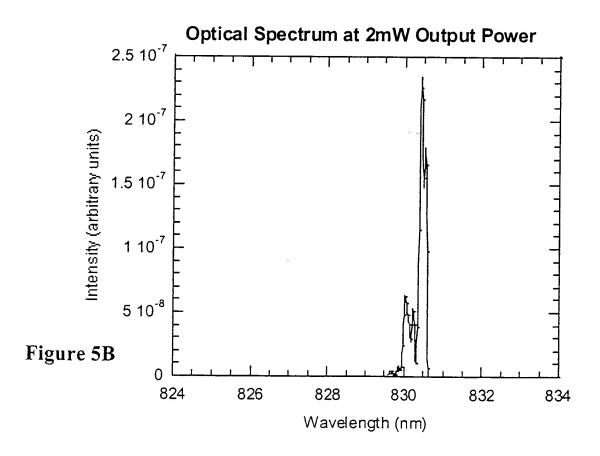


Figure 4





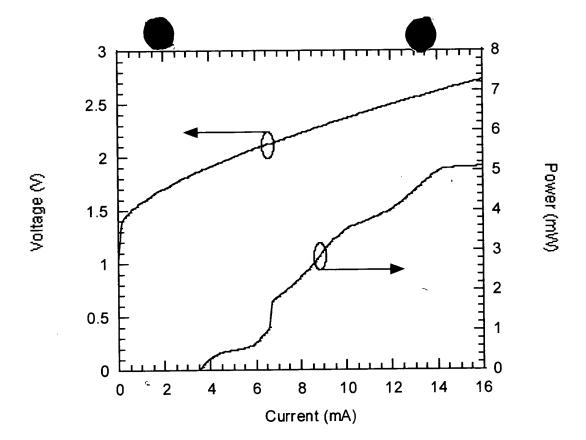


Figure 6a Prior art

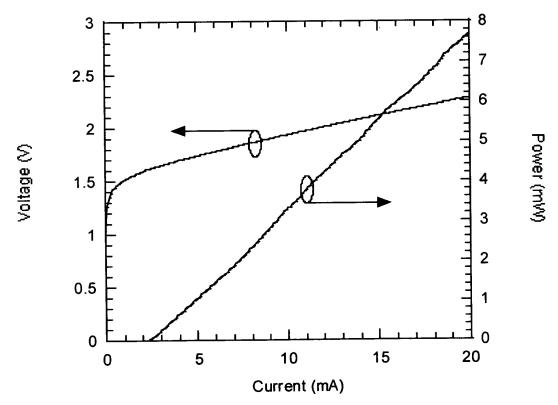


Figure 6b